# Department 24Y — Mechanical Sciences Class A — Model Airplanes

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 1. Airplane made to fly, NO kit, wingspan: 20" or less
- 2. Airplane made to fly, NO kit, wingspan: over 20"
- 3. Airplane made to fly, from kit, wingspan: 20" or less
- 4. Airplane made to fly, from kit, wingspan: over 20"
- 5. Poster on basic parts of airplane

## Class B — Model Rocketry

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 6. Single stage rocket
- 7. Multi-stage rocket
- 8. Exotic design rocket
- 9. Homemade design rocket
- 10. Poster on basic parts of a rocket
- 11. Scale model rocket

## Class C — Radio Controlled Airplanes

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 12. Detailed poster or display showing safety procedures while flying a radio controlled airplane
- 13. Detailed poster or display showing the Academy of Model Aeronautics recommended radio controlled flying site specifications
- 14. Demonstration showing the safety procedures to be followed while flying a radio controlled airplane
- 15. Demonstration on the flight simulator or a flight pattern including a takeoff and landing

## Class D — Bicycle

Premium — \$2.00, \$1.75, \$1.50, \$1.25

16. An educational display related to the bicycle

## Class E — Legos

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 17. Poster about Lego project
- 18. Lego display mounted on a base (landscape, village, scene, etc.); maximum base size 24"x24"
- 19. Free standing Lego creation, no size limit
- 20. Lego display from a kit
- 21. Any other building material (not Legos) such as K'nex, Magnetix, Erector or Gears

### Class F — Small Engines

Premium — \$1.75, \$1.50, \$1.25, \$1.00

- 22. Complete small engine, label all external parts
- 23. Complete small engine block with all internal parts separated, exposed and labeled (panel exhibit)
- 24. Poster showing correct steps in preparing a small engine for off-season storage
- 25. Small engine safety poster on: tiller, mini-bike, go-cart, lawn mower, etc.
- 26. Poster listing preventative maintenance measures recommended for 2-cycle small engine
- 27. Any other exhibit related to small engine

#### Class G — Scale Model

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 28. Model car
- 29. Model truck
- 30. Model boat or ship
- 31. Model airplane
- 32. Model spaceship, satellite
- 33. Model educational display: skeleton, etc.

#### Class H — Tractors

Premium — \$2.50, \$2.25, \$2.00, \$1.75

- 34. Poster or display showing safety procedure while using at least two types of farm equipment
- 35. Poster or display showing proper maintenance procedures of at least 2 types of farm equipment
- 36. Any other educational display

## Class I — Off Highway Vehicle

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 37. Poster or display showing safety procedures to be observed while operating an off highway vehicle
- 38. Any other poster or display regarding off highway vehicle

## Class J — Computers

## All equipment necessary for displaying project or activity is exhibitor's responsibility Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 39. Lab exterior parts of computer
- 40. A multimedia presentation (maximum of 10 slides)
- 41. Educational poster or display
- 42. Create website and steps required in developing it
- 43. Create database and generate at least 3 reports of graphs from data
- 44. Basic "How to..." poster, pamphlet or PowerPoint presentation

## Class K — Robotics (& Geospatial)

Premium — \$2.00, \$1.75, \$1.50, \$1.25

- 45. Booklet describing what was done or learned in project
- 46. Poster (14"x22") showing what was done or learned in project
- 47. Display showing what was done or learned in project
- 48. Any other exhibit to show what was done or learned in project
- 49. Robotics programming demonstration